

Claims

1. A method for protecting an entity from the effects of an explosion or from the effects of contact with a projectile comprising covering at least a part of said entity in a barrier comprising a water gel.
2. A method as claimed in claim 1 wherein said water gel is formed from water and a gel selected from gelatin, gellan gum gels, poly(γ -benzyl-L-glutamate), agar, collagen, protein gels, polysaccharide gels, keratin gels, hydrogels, ormosils, sol-gels, hydrophilic polymer gels, glycoprotein gels, carrageenans, pectins, alginates, seed gums, egg protein g and Gelacrimide gels and mixtures thereof.
3. A method as claimed in claim 2 wherein said water gel is formed from gelatin and water.
4. A method as claimed in any one of claims 1 to 3 wherein the concentration of gel in said water gel is 3 to 40% wt.
5. A method as claimed in claim 4 wherein the concentration of gel in said water gel is 5 to 25% wt.
6. A method as claimed in claim 1 to 5 to protect an entity from the effects of an explosion.
7. A method as claimed in any one of claims 1 to 5 to mitigate the effects of contact with a projectile.
8. A barrier comprising a water gel layer and a polymer layer, a metal layer, a ceramic layer, a fabric layer, a fibreglass layer, a dilatant layer or mixtures of such layers.

9. A barrier as claimed in claim 8 wherein the gel is gelatin.

10. A barrier as claimed in claim 8 or 9 comprising a
5 dilatant layer containing a polyethylene oxide layer.

11. A barrier as claimed in claim 8 to 10 comprising a
layer of fire retardant material, a layer of material
impervious to chemicals, radioactivity or biological
10 agents.

12. A barrier to protect against the effects of an
explosion or the effects of contact with a projectile
comprising gelatin and water, wherein the concentration
15 of gelatin in the water is at least 3% w/w.

13. Use of a water gel in pressure impulse mitigation.

14. Use of a water gel to protect entities against
20 chemical, biological or radiological contamination.

15. A ship or vehicle comprising a barrier as claimed
in claim 8 to 11.